

### **ABSTRACT OF THE DISCLOSURE**

An off-line feed rate scheduling method of a CNC machining process includes selecting a constraint variable and inputting a reference value related to the constraint variable; estimating a cutting configuration where a maximum constraint variable value (CVV) occurs through ME Z-map modeling; receiving the estimated cutting configuration and estimating a specific rotation angle ( $\phi_s$ ) where the maximum constraint variable value occurs through constraint variable modeling; calculating a feed rate that satisfies the reference value of the constraint variable at the estimated specific rotation angle; and applying the calculated feed rate to the NC code. Cutting force or machined surface error may be selected as a constraint variable depending on machining conditions.